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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/721,379

11/26/2003

Kwang-Hoon Jeon

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/721,379

Applicant(s)

JEON, KWANG-HOON

Examiner

Kimnhung Nguyen

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2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 6 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 7-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application has been examined. The claims 1-9 are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jun (US 6,747,620) in view of Kim (US 2003/0035065).

As to claim 1, Jun discloses in fig. 1, an image display device, the device comprising:

Panel (250) provided with an address electrodes and data electrodes (because Jun discloses the resolution in the display, see scaler 220 converts the video signal to the resolution of the LCD 250, therefore, see col. 3, lines 61-63); a scaler (220) for converting an input image signal to fit into a resolution of the panel (see col. 3, lines 61-63); an inherent address driver and a data driver for driving the address electrodes and the data electrodes, respectively, inresponse to an image signal from the scaler (220). Jun also discloses a control means (230) output from the scaler (220).

However Jun does not disclose a luminance control means for comparing line by line changes of the image signal outputted from the scaler, changing luminance of the image signal outputted from the scaler according to a results of the comparison, and chaning a number of operations.

Kim discloses in fig. 1-2, a luminance control means (controller 105) for comparing (comparator 104, fig. 1) by changing of the image signal outputted from the scaler (207, fig. 4), and changing luminance (level detector 103) of the image signal outputted from the scaler (207) to a results of the comparison (104, see 0027-0029).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the controller by changing of the image signal outputted from the scaler, and changing luminance (see RGB) of the image signal outputted from the scaler to a results of the comparison as taught by Kim into the display system of Jun for producing the claimed invention because this would provide to determine the signal type after analyzing the comparison results data received from the comparator of high or low output signal and from this to reduce the possibility that the type determination may be wrong due to noise (see 0029).

Allowable Subject Matter

4. Claims 2-5 and 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: None of the cited art teaches or suggests that wherein the luminance control means includes a line delay unit for delaying the image signal outputted from the scaler by predetermined period of time; a line comparison part for comparing luminance of the pixels for the image signals outputted from the line delay unit and the scaler; a counter for counting a number of luminance differences among the pixels compared in the comparator; and a luminance control part for

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controlling the scaler in response to a results of the counting of the counter and changing the luminance of the image signal outputted from the scaler as claim 2; or the image display device further comprising a pixel pattern detector for detecting an on and off pattern of data of individual pixels constituting the image signal outputted to each line, and applying the detected pattern to the luminance control part in order for the luminance control part to change the luminance of the image signal outputted from the scaler as claim 5; or wherein the luminance change step includes steps of comparing the image signal outputted from the scaler line by line, and counting a number of luminance changes among pixels constituting the lines; and changing the luminance of the image signal outputted from the scaler according to the number of luminance changes counted as claim 8.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimnhung Nguyen
December 7, 2006



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
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